

## INFORMATION REPORT INFORMATION REPORT

CENTRAL INTELLIGENCE AGENCY

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SOURCE EVALUATIONS ARE DEFINITIVE. APPRAISAL OF CONTENT IS TENTATIVE.

1. The installation on Gorodomlya Island was engaged, until 1948, in the reconstruction of the A-4 (V-2) rockets. The first trial firing of these rockets over a range of 150 to 200 kilometers took place in a desert area in the Caucasus in late summer 1948.<sup>1</sup> A lower degree of accuracy was achieved there than by the Germans during the war. During this trial an improvement in the control mechanism was proposed which resulted in four times the accuracy previously attained with the V-2. Some of the German specialists were present at this first trial, but at none of the other trials during their stay in the USSR. 25X1
2. After this trial, Fischer's group was given the task of developing rockets with greater ranges. Between the trial and October 1951, designs were produced for twenty types of rockets, the last eight of which were to have a range of 600 kilometers. 25X1
3. In addition to the development of rockets, further progress was made with the track simulator, on which work had previously been started at Bleicher. The track simulator is an instrument which calculates, from the rocket's flight formula, the rocket's position at any given time during flight and at the moment of impact with its target. The calculation can be made either on the basis of the individual curves deduced by the ballistics experts or by reference to the figures produced during flight by the ground control station. Tactically, no correction during flight could be effected by means of the track simulator, as the curves shown by the oscillographs first had 25X1

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to be photographed and photographs then had to be developed. The indication of the target was held on a special oscillograph and was immediately visible at the moment when the flight stopped. In 1951, Dr. Alois Hoch went to Moscow with other specialists from Gorodomlya Island and received instructions to improve the design of the track simulator in such a manner that the curves, up to then only observable on the photographed diagrams, should be projected on to a screen during flight, so that it would be possible to carry out any necessary correction to the track while the rocket was airborne.

4. Such a development required substantial improvement in the equipment, and in the ground and airborne control equipment it was achieved. Control was effected by means of five concave reflectors, with a radius of 2.5 meters, which automatically locked on to the rocket as it entered the reflectors' area of control (sic: welche von der Rakete aus in die Bahn desselben automatisch gelenkt werden). The distance and speed were recorded at the ground station, which was developed so that any necessary correction could be made from it. Similarly, any deviation from the prescribed track could be automatically corrected. In the case of all new-type rockets, the propelling part was discarded during flight when the necessary speed and required distance from the ground station had been reached.
5. The first track simulator was designed for a flight duration of four minutes, corresponding to a range of 200 kilometers; the fourth one was designed for a flight duration of 12 minutes, corresponding to a range of approximately 1,000 kilometers. 40 units of the last model were ordered, thus giving a clue as to the stage at which development ceased.

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1.  Comment.   
the trials took place at Kapustin Yar, near Stalingrad, and not in the Caucasus.

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